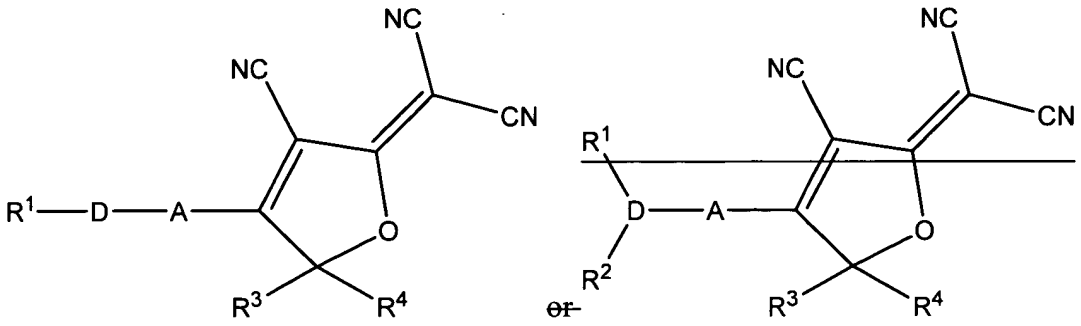
AMENDMENTS TO THE CLAIMS

The following is a complete listing of the claims.

1-2. (Cancelled)

3. (Currently amended) A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



wherein:

D is a donor group comprising an oxygen atom conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R^1 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

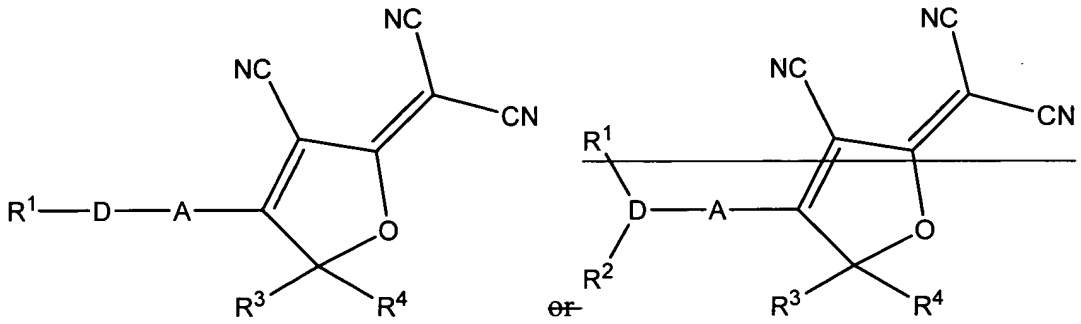
~~R^2 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;~~

R^3 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

R^4 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R^3 is methyl, and R^4 is methyl).

4. (Currently amended) A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



wherein:

D is a donor group comprising a sulfur atom conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R^1 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

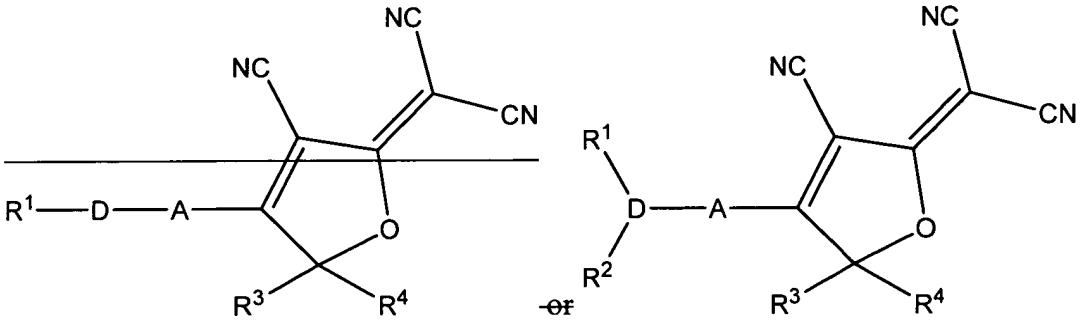
~~R^2 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;~~

R^3 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

R^4 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R^3 is methyl, and R^4 is methyl).

5. (Currently amended) A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



wherein:

D is a donor group comprising a phosphorous atom conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R^1 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R^2 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

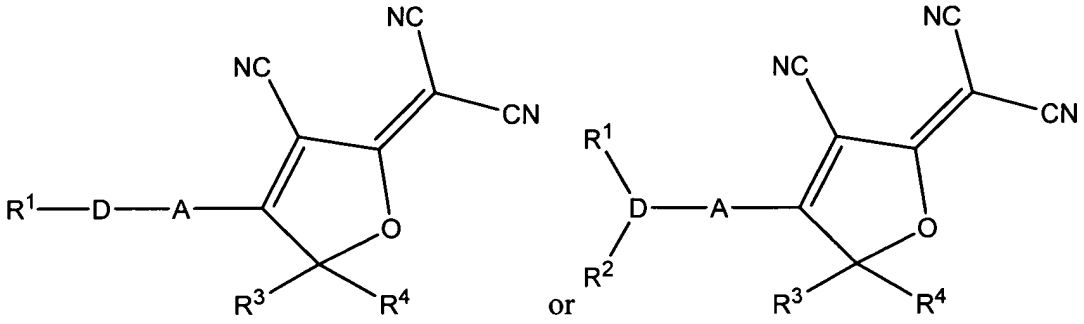
R^3 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

R^4 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R^3 is methyl, and R^4 is methyl).

6-7. (Cancelled).

8. (Currently amended) A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



(I) (II)

wherein:

D is a donor group comprising a donor atom having at least one free electron pair conjugated with A, wherein the donor atom is an oxygen atom or a sulfur atom for structure (I), or, a nitrogen atom or a phosphorous atom for structure (II);

A is thiophene, furan, pyrrole, imidazole, pyrazole, oxazole, thiazole, diazole, oxadiazole, or thiadiazole;

R^1 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R^2 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

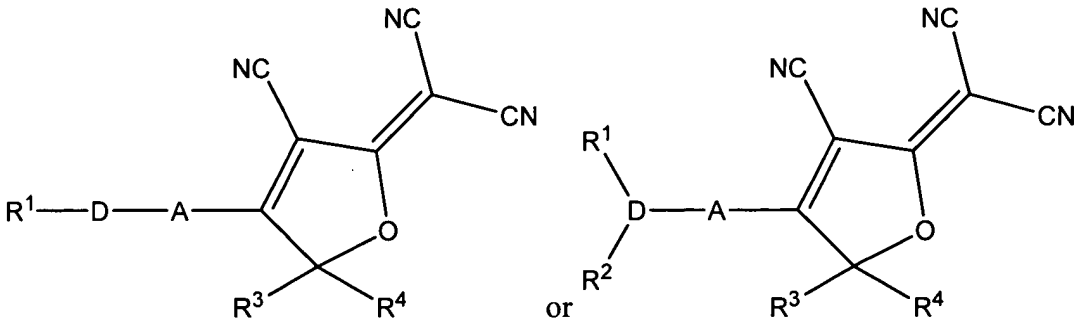
R^3 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

R^4 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; and

wherein when the donor atom is a nitrogen atom, R^1-R^4 are not alkyl groups or fluoroalkyl groups, the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R^3 is methyl, and R^4 is methyl).

9. (Cancelled).

10. (Currently amended) A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



(I) (II)

wherein:

D is a donor group comprising a donor atom having at least one free electron pair conjugated with A, wherein the donor atom is an oxygen atom or a sulfur atom for structure (I), or, a nitrogen atom or a phosphorous atom for structure (II);

A comprises a tolane group;

R^1 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R^2 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

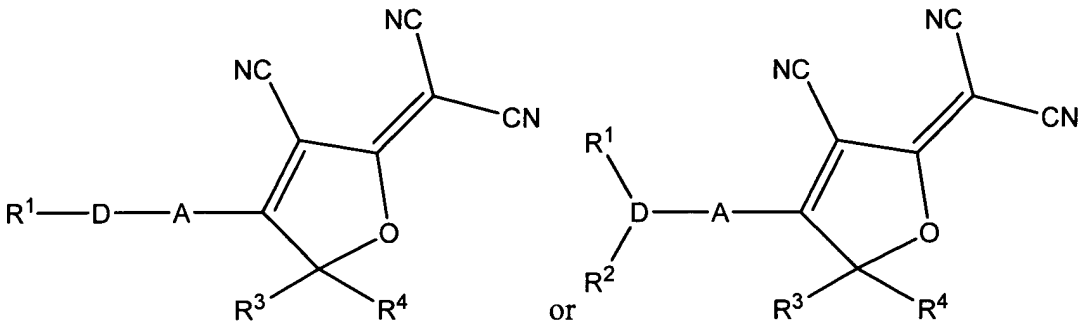
R^3 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

R^4 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R^3 is methyl, and R^4 is methyl).

11. (Cancelled).

12. (Currently amended) A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



(I) (II)

wherein:

D is a donor group comprising a donor atom having at least one free electron pair conjugated with A, wherein the donor atom is an oxygen atom or a sulfur atom for structure (I), or, a nitrogen atom or a phosphorous atom for structure (II);

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R^1 is an alkyl group, aromatic group, substituted aromatic group, methoxymethyl, methoyxethyl, ethoxymethyl, ethoxyethyl or hydrogen;

R^2 is an alkyl group, aromatic group, substituted aromatic group, methoxymethyl, methoyxethyl, ethoxymethyl, ethoxyethyl or hydrogen;

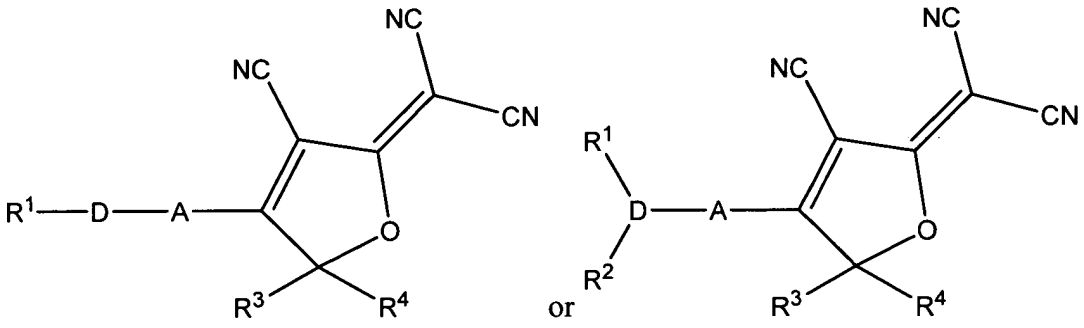
R^3 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

R^4 is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group; and

wherein when the donor atom is a nitrogen atom, R^1-R^4 are not alkyl groups or fluoroalkyl groups, the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-

dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R^3 is methyl, and R^4 is methyl).

13. (Currently amended) A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



(I) (II)

wherein:

D is a donor group comprising a donor atom having at least one free electron pair conjugated with A, wherein the donor atom is an oxygen atom or a sulfur atom for structure (I), or, a nitrogen atom or a phosphorous atom for structure (II);

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R^1 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R^2 is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R^3 is an alkyl group, aromatic group, substituted aromatic group, trifluoromethyl or pentafluoroethyl;

R^4 is an alkyl group, aromatic group, substituted aromatic group, trifluoromethyl or pentafluoroethyl; and

wherein when the donor atom is a nitrogen atom, R^1-R^4 are not alkyl groups or fluoroalkyl groups, the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R^3 is methyl, and R^4 is methyl).

14-40. (Cancelled).